SAFETY DATA SHEET

United Elchem Industries

1. Identification

Product identifier	UNI-WELD CPVC Medium Orange Cement
Other means of identification	
Product code	2201E
Synonyms	Part Numbers: 3266S, 3256S, 3246S, 3236S
Recommended use	Joining PVC Pipes
Recommended restrictions	None known.
Manufacturer/Importer/Supplier	/Distributor information
Company Name	United Elchem Industries c/o Oatey Co.
Address	4700 West 160th Street
	Cleveland, OH 44135
Telephone	216-267-7100
E-mail	info@oatey.com
Transport Emergency	Chemtrec 1-800-424-9300 (Outside the US 1-703-527-3887)
Emergency First Aid	1-877-740-5015
Contact person	MSDS Coordinator
2. Hazard(s) identification	

Physical hazards	Flammable liquids	Category 2
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Aspiration hazard	Category 1
OSHA defined hazards	Not classified.	

Label elements



Danger

Signal word Hazard statement

Highly flammable liquid and vapor. Harmful if swallowed. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.

Precautionary statement Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response If swallowed: Immediately call a poison center/doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish.

Storage

Disposal

Hazard(s) not otherwise classified (HNOC)

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. May form explosive peroxides. Contains a chemical classified by the US EPA as a suspected possible carcinogen.

Supplemental information

Not applicable.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Furan, Tetrahydro-	109-99-9	30-60
Methyl ethyl ketone	78-93-3	10-30
Ethene, chloro-, homopolymer, chlorinated	68648-82-8	10-20
Acetone	67-64-1	5-15
Cyclohexanone	108-94-1	5-15
Silica, amorphous, fumed	112945-52-5	1-5

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON
	CENTER or doctor/physician if you feel unwell.
Skin contact	Take off immediately all contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Call a physician or poison control center immediately. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Aspiration may cause pulmonary edema and pneumonitis.
Most important symptoms/effects, acute and delayed	Irritation of nose and throat. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.
5. Fire-fighting measures	
Suitable extinguishing media	Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Highly flammable liquid and vapor. This product contains tetrahydrofuran that may form explosive organic peroxide when exposed to air or light or with age.

6. Accidental release measures

o. Addiadinal release mea	
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water.
	Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.
	Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Vapors may form explosive mixtures with air. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	
Acetone (CAS 67-64-1)	PEL	2400 mg/m3	
		1000 ppm	
Cyclohexanone (CAS 108-94-1)	PEL	200 mg/m3	
		50 ppm	
Furan, Tetrahydro- (CAS 109-99-9)	PEL	590 mg/m3	
		200 ppm	
Methyl ethyl ketone (CAS 78-93-3)	PEL	590 mg/m3	
		200 ppm	
US. OSHA Table Z-3 (29 CFR 1910	.1000)		
Components	Туре	Value	
Silica, amorphous, fumed (CAS 112945-52-5)	TWA	0.8 mg/m3	
		20 mppcf	
US. ACGIH Threshold Limit Value	S		
Components	Туре	Value	
Acetone (CAS 67-64-1)	STEL	750 ppm	

US. ACGIH Threshold Limit Values

Components	Туре	Value	
	TWA	500 ppm	
Cyclohexanone (CAS 108-94-1)	STEL	50 ppm	
	TWA	20 ppm	
Furan, Tetrahydro- (CAS 109-99-9)	STEL	100 ppm	
	TWA	50 ppm	
Methyl ethyl ketone (CAS 78-93-3)	STEL	300 ppm	
	TWA	200 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Туре	Value	
Acetone (CAS 67-64-1)	TWA	590 mg/m3	
		250 ppm	
Cyclohexanone (CAS 108-94-1)	TWA	100 mg/m3	
		25 ppm	
Furan, Tetrahydro- (CAS 109-99-9)	STEL	735 mg/m3	
		250 ppm	
	TWA	590 mg/m3	
		200 ppm	
Methyl ethyl ketone (CAS 78-93-3)	STEL	885 mg/m3	
		300 ppm	
	TWA	590 mg/m3	
		200 ppm	
Silica, amorphous, fumed (CAS 112945-52-5)	TWA	6 mg/m3	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Acetone (CAS 67-64-1)	50 mg/l	Acetone	Urine	*
Cyclohexanone (CAS 108-94-1)	80 mg/l	1,2-Cyclohexan ediol, with hydrolysis	Urine	*
	8 mg/l	Cyclohexanol, with hydrolysis	Urine	*
Furan, Tetrahydro- (CAS 109-99-9)	2 mg/l	Tetrahydrofura n	Urine	*
Methyl ethyl ketone (CAS 78-93-3)	2 mg/l	MEK	Urine	*
* - For sampling details, ple	ease see the sour	ce document.		

Exposure guidelines

Can be absorbed through the skin.
Skin designation applies.
Can be absorbed through the skin.
Can be absorbed through the skin.
Can be absorbed through the skin.
Can be absorbed through the skin.

Appropriate engineering controls	Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.
Individual protection measures	s, such as personal protective equipment
Eye/face protection	Face shield is recommended. Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear appropriate chemical resistant clothing.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Translucent liquid.
Color	Orange
Odor	Solvent.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	151 °F (66.11 °C)
Flash point	14.0 - 23.0 °F (-10.05.0 °C)
Evaporation rate	5.5 - 8
Flammability (solid, gas)	Not available.
Upper/lower flammability or expl	losive limits
Flammability limit - lower (%)	1.8
Flammability limit - upper (%)	11.8
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	145 mm Hg @ 20 C
Vapor density	2.5
Relative density	0.94 +/- 0.02
Solubility(ies)	
Solubility (water)	Negligible
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	500 - 1500 cP
Other information	
Bulk density	7.8 lb/gal
VOC (Weight %)	< 510 g/l SQACMD 1168/M316A

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Acids. Strong oxidizing agents. Ammonia. Amines. Isocyanates. Caustics.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May be fatal if swallowed and enters airways. Headache. Nausea, vomiting. May cause irritation to the respiratory system. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	May be fatal if swallowed and enters airways. Harmful if swallowed. Harmful if swallowed. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
Symptoms related to the physical, chemical and toxicological characteristics	Irritation of nose and throat. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Information on toxicological effects

Acute toxicity

May be fatal if swallowed and enters airways. Narcotic effects. May cause respiratory irritation.

Components	Species	Test Results
Acetone (CAS 67-64-1)		
Acute		
Dermal		
LD50	Rabbit	20 ml/kg
Inhalation		
LC50	Rat	50 mg/l, 8 Hours
Oral		
LD50	Rat	5800 mg/kg
Cyclohexanone (CAS 108-94-1)		
Acute		
Dermal		
LD50	Rabbit	948 mg/kg
Inhalation		
LC50	Rat	8000 ppm, 4 hours
Oral		
LD50	Rat	1540 mg/kg
* Estimates for product may b	e based on additional component data not shown.	
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitizatio	n	
Respiratory sensitization	Not available.	
Skin sensitization	This product is not expected to cause skin sensitization	tion.
Germ cell mutagenicity	No data available to indicate product or any compor mutagenic or genotoxic.	ents present at greater than 0.1% are

Carcinogenicity In 2012 USEPA Integrated Risk Information System (IRIS) reviewed a two species inhalation lifetime study on THF conducted by NTP (1998). Male rats developed renal tumors and female mice developed liver tumors while neither the female rats nor the male mice showed similar results. Because the carcinogenic mechanisms could not be identified clearly in either species for either tumor, the EPA determined that the male rat and female mouse findings are relevant to the assessment of carcinogenic potential in humans. Therefore, the IRIS review concludes that these data in aggregate indicate that there is "suggestive evidence of carcinogenic potential" following exposure to THF by all routes of exposure.

IARC Monographs. Overall Evaluation of Carcinogenicity

Cyclohexanone (CAS 108 Silica, amorphous, fumed OSHA Specifically Regulate		3 Not classifiable as to carcinogenicity to humans. 3 Not classifiable as to carcinogenicity to humans. 001-1050)
Not listed.		
Reproductive toxicity	This product is not expected to	o cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Narcotic effects. May cause d	rowsiness and dizziness. Respiratory tract irritation.
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	May be fatal if swallowed and	enters airways.
Chronic effects	Prolonged inhalation may be h	narmful.

12. Ecological information

Ecotoxicity	Ecot	oxi	city	1
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The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
Acetone (CAS 67-64	-1)		
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promel	as) > 100 mg/l, 96 hours
Cyclohexanone (CAS	S 108-94-1)		
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promel	as) 481 - 578 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential	No data available.	
Partition coefficient n-oct	anol / water (log Kow)	
Acetone (CAS 67-64-1)		-0.24
Cyclohexanone (CAS 108-9	94-1)	0.81
Furan, Tetrahydro- (CAS 10)9-99-9)	0.46
Methyl ethyl ketone (CAS 7	8-93-3)	0.29

Mobility in soil No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT	
UN number	UN1133
UN proper shipping name	Adhesives
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	11
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	T11, TP1, TP8, TP27
Packaging exceptions	150
Packaging non bulk	201
Packaging bulk	243
ΙΑΤΑ	
UN number	UN1133
UN proper shipping name	Adhesives
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	ll
Environmental hazards	No.
ERG Code	3L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
IMDG	
UN number	UN1133
UN proper shipping name	ADHESIVES
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	No.
EmS	F-E, S-D
· · ·	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not available.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Acetone (CAS 67-64-1)	LISTED
Cyclohexanone (CAS 108-94-1)	LISTED
Furan, Tetrahydro- (CAS 109-99-9)	LISTED
Methyl ethyl ketone (CAS 78-93-3)	LISTED

Reactivity Hazard - No

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes
-	Delayed Hazard - No
	Fire Hazard - Yes
	Pressure Hazard - No

SARA 302 Extremely hazard Not listed.	lous substance		
SARA 311/312 Hazardous chemical	No		
SARA 313 (TRI reporting) Not regulated.			
Other federal regulations			
Clean Air Act (CAA) Section	112 Hazardous Air Pollutant	s (HAPs) List	
Not regulated. Clean Air Act (CAA) Section	112(r) Accidental Release Pr	evention (40 CFR 68.130)	
Not regulated.			
Safe Drinking Water Act (SDWA)	Not regulated.		
Drug Enforcement Adm Chemical Code Number		ential Chemicals (21 CFR 1310.02(b) and 1	1310.04(f)(2) and
Acetone (CAS 67-64		6532	
Methyl ethyl ketone (6714	10(-))
		Exempt Chemical Mixtures (21 CFR 1310.1	2(C))
Acetone (CAS 67-64 Methyl ethyl ketone (35 %WV 35 %WV	
DEA Exempt Chemical I	· · · · ·	55 / WW	
Acetone (CAS 67-64	-1)	6532	
Methyl ethyl ketone (CAS 78-93-3)	6714	
US state regulations			
US. Massachusetts RTK - Su	ubstance List		
Acetone (CAS 67-64-1)			
Cyclohexanone (CAS 108			
Furan, Tetrahydro- (CAS Methyl ethyl ketone (CAS			
Silica, amorphous, fumed			
	Community Right-to-Know A	Act	
Acetone (CAS 67-64-1)			
Cyclohexanone (CAS 108			
Furan, Tetrahydro- (CAS Methyl ethyl ketone (CAS			
	nd Community Right-to-Know	/ Law	
Acetone (CAS 67-64-1)	, , , , , , , , , , , , , , , , , , ,		
Cyclohexanone (CAS 108	3-94-1)		
Furan, Tetrahydro- (CAS			
Methyl ethyl ketone (CAS Silica, amorphous, fumed			
US. Rhode Island RTK	(CAS 112945-52-5)		
Acetone (CAS 67-64-1)			
Cyclohexanone (CAS 108	3-94-1)		
Furan, Tetrahydro- (CAS			
Methyl ethyl ketone (CAS			
US. California Proposition 6		-t -f 4000 (Draw a sitism OF). This was taken in the	
any chemicals currently li	sted as carcinogens or reprodu	ct of 1986 (Proposition 65): This material is ctive toxins.	not known to contain
International Inventories			
Country(s) or region	Inventory name		On inventory (yes/no)*
Canada	Domestic Substances List (D	,	Yes
United States & Puerto Rico	Toxic Substances Control Act		Yes
		ents administered by the governing country(s). t listed or exempt from listing on the inventory adr	ninistered by the governing

16. Other information, including date of preparation or last revision

Issue date
Revision date
Version #
HMIS® ratings

27-May-2015 -01 Health: 2

Flammability: 3 Physical hazard: 0

NFPA ratings



Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. United Elchem Industries c/o Oatey Co. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.